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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/069,182

05/22/2002

Takuo Sakai

0397-0441P

7643

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7590

09/22/2004

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EXAMINER

WARE, DEBORAH K

ART UNIT

PAPER NUMBER

1651

DATE MAILED: 09/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/069,182

Applicant(s)

SAKAI, TAKUO

Examiner

Deborah K. Ware

Art Unit

1651

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 and 3-9 are presented for reconsideration on the merits.

The drawings filed May 22, 2002 are acceptable to the examiner.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Papers

The amendment filed June 23, 2004, has been received and entered. The miscellaneous paper filed July 29, 2004 has also been received. The declaration filed under 37 CFR 1.132 has been received.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by EP 0 880 894 A1, cited of record.

Applicant's arguments filed June 23, 2004, have been fully considered but they are not persuasive. The argument that the limitation of claim 2 inserted into claim 1 remedies the instant rejection is noted. However, this argument is not deemed persuasive since the composition appears to be identical to antibacterial composition of the EP '894 patent and the product must stand on its own for patentability and a process

of making a product does not necessarily make a product differ from those of the prior art. The rejection is thus, maintained.

Claim Rejections - 35 USC § 103

Claims 1 and 3-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO '135 or US '382, both in view of Sakai et al, all cited of record.

Applicant's arguments filed June 23, 2004, have been fully considered but they are not persuasive. Sakai et al specifically teach that protopectinases has potent activity upon plant tissue and to replace solvent extraction with enzyme extraction or degradation for providing an antibacterial substance is well within the teachings of the cited prior art. The '135 and '382 patents clearly teach the desire to produce bacteriocidal compounds from plant tissue via methods of extraction and enzyme extraction is a normal method employed by those of skill in the art. One of skill in the art would have expected successful results using protopectinases as disclosed by Sakai et al. To combine the cited references is clearly prima facie obvious. The combination would have been logical since the enzyme, protopectinase, is disclosed to be useful for degrading plant tissue. The motivation to combine the references lies in the fact that each reference discloses plant tissue for which extraction or disintegration is desired, therefore. The '382 patent clearly teaches adding the bacteriocide to food, including beverages (i.e. soft drink). Note col. 3, line 56.

In response to applicant's argument that there is no suggestion or motivation to combine the patents with Saika et al and the citation of In re Regel et al is noted, but the fact that applicant has recognized another advantage which would flow naturally from

following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Further, with respect to a reference being silent with respect to antibacterial activity of pectin, this property is intrinsic to pectin and it should be noted that Applicants' claimed subject matter does not clearly identify pectin as having antibacterial activity; and the enzyme need only be capable of acting on protopectin to release a pectin substance so the claims do not actually require the presence of pectin in the claimed antibacterial substance.

The results in the declaration set forth by Mr. Sakai under 37 CFR 1.132, are noted. However, a product by process does not necessarily define and distinguish from a product of the prior art based on how it is made. The results obtained and demonstrated in the declaration using an enzyme are expected successful results because with respect to most of the comparison samples of A and B, there were more cells grown for sample B than for Sample A and thus, number of spores budded would have been expected to be more for sample B because more cells grew initially. The results are not conclusive with respect to most of the samples, except for the potato sample wherein both A and B samples grew the approximately the same number of cells and sample B had more buds. The results are not superior in all instances with the exception of the potato sample. Furthermore, it is not clear from the instantly filed declaration that the samples were prepared the same way as set forth in the instantly filed specification.

Therefore, for these reasons noted above and those of record, the claims remain prima facie obvious over the cited prior art.

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah K. Ware whose telephone number is 571-272-0924. The examiner can normally be reached on 9:30-6:00.

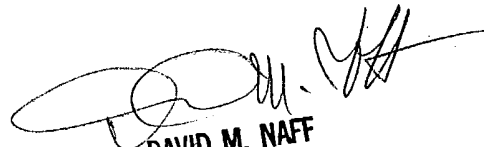
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Wityshyn can be reached on 571-272-0926. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1651

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Deborah K. Ware
September 18, 2004



DAVID M. NAFF
PRIMARY EXAMINER
ART UNIT 12851